

III.—On the *Lucernaria cyathiformis* of Sars.

By P. H. GOSSE, Esq., F.R.S., A.L.S.

To the Editors of the *Annals and Magazine of Natural History*.

GENTLEMEN,

In the 'Quarterly Journal of Microscopical Science' for this month, Professor Allman has described and figured what he considers to be the *Lucernaria cyathiformis* of Sars, instituting for it a new genus, under the name of *Carduella*. I feel sure he was not aware that I had already separated it from *Lucernaria*, under the generic name of *Depastrum*, in the 'Annals' for June 1858, page 419*.

But I also had found what I supposed to be the *L. cyathiformis* on repeated occasions at Weymouth, viz. in the spring and summer of 1853. The specimens were in each case affixed to the under surfaces of stones at very low water. I had made careful magnified figures of my specimens, which I forward with this letter. It is manifest that Prof. Allman's and mine do not represent the same species; and, on comparing each with Sars's diagnosis (as cited by Johnston, Br. Zooph. i. 474, the only reference at my command), it appears that the Orkney species agrees with the Norwegian, while the Weymouth species differs from it.

The most important points of difference are: 1. the disk in *Depastrum cyathiforme* is circular and entire, in *D. stellifrons* (by which name I propose to distinguish the southern type) distinctly 8-angled; 2. the tentacles in *D. cyathiforme* are unifarious and equal, in *D. stellifrons* bi- or tri-farious and notably unequal; 3. the tentacles in *D. cyathiforme* spring from a circle within the margin, in *D. stellifrons* from the margin or without it; 4. in *D. cyathiforme* the tentacles are represented as very regularly capitate; in *D. stellifrons* the distinction between the pedicle and the head is much less marked, and they are frequently rather clavate than capitate; 5. the hue in *D. cyathiforme* is represented as brownish-red; in *D. stellifrons* it was (in my specimens) a dull olive, becoming pale on the disk, and tinged with umber on the body, the tentacles and ovaries white. The disk in *D. stellifrons* was studded with minute white granules, arranged in eight radiating groups.

It follows that a new generic diagnosis is needed for this form; for both the one I had given for *Depastrum* and the one Prof.

* In the 3rd vol. of the 'Histoire Naturelle des Coralliaires,' just published (1860), M. Milne-Edwards has given a third generic title to the same animal, viz. that of *Calicinaria*.

Allman has now given for *Carduella* are defective, each containing characters that belong to the particular species respectively. The diagnoses of both genus and species may be corrected thus:—

DEPASTRUM, Gosse.

Corpus repente contractum, et supra et infra alvum.

D. cyathiforme, Sars.

Discus circularis; tentacula monosticha, æqualia, intra marginem disci salientia.

D. stellifrons, Gosse.

Discus octangularis; tentacula di-tristicha, inæqualia, ad marginem disci salientia, inter angulos.

I am, Gentlemen,
Your obedient Servant,
P. H. GOSSE.

Torquay, April 7, 1860.

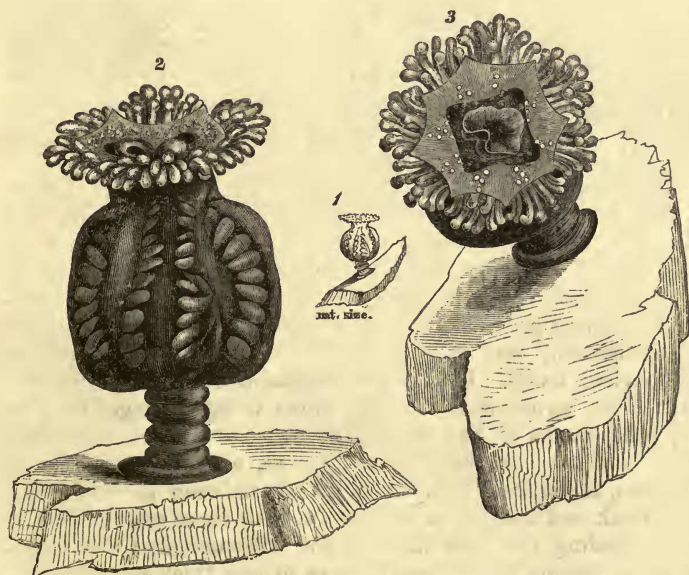


Fig. 1. *Depastrum stellifrons*, natural size.
Fig. 2. The same, magnified, lateral aspect.
Fig. 3. The same, magnified, vertical aspect.